

LVI.—*Diagnosis of a new Subspecies of Gazelle from British East Africa.* By OLDFIELD THOMAS.

*Gazella Grantii notata*, subsp. n.

Closely allied in essential characters to the typical *G. Grantii*, but distinguished by the greater length, breadth and intensity of both the dark and light lateral bands—the former black, the latter light buff and edged above posteriorly with a second dark band, less dark than the main lateral band, but much darker than the centre of the back. Pygal band broad, deep black.

*Hab.* West slope of Loroqi Mountains, British East Africa.

*Type* Brit. Mus. no. 97. 1. 30. 2. Killed Oct. 9, 1895. Collected and presented by Arthur H. Neumann, Esq.

This handsome gazelle has also been obtained in the same region by Mr. H. S. H. Cavendish.

BIBLIOGRAPHICAL NOTICES.

*A Dictionary of Birds.* By ALFRED NEWTON, assisted by HANS GADOW; with Contributions from R. LYDEKKER, C. S. ROY, and R. W. SHUFELDT. London: A. & C. Black.

WHEN the publication of the ninth edition of the 'Encyclopædia Britannica' was commenced many of its readers saw with dismay the treatment accorded to the Birds; but by the time the word "Bullfinch" was reached a change of author had evidently taken place, and an admirable series of articles followed over the initials A. N. The most important of these was, perhaps, the treatise entitled "Ornithology," and suggestions were made in several quarters that on the conclusion of the Encyclopædia a revised issue of these articles in octavo form would be desirable. By degrees the publishers adopted this view, and in 1893 appeared Part I. of the present work, while the end of 1896 witnessed the conclusion of Part IV. It is hardly necessary to say that, owing to the self-exacting character of Prof. Newton, the original articles formed little more than a foundation, many of those in the present series having practically been rewritten, while others have been added; the result being a work of which it would be difficult to speak too highly. It is, moreover, a fascinating book, for a search under a definite heading is sure to lead to the perusal of some other article, perhaps far apart from the original objective—in which respect it resembles Yule and Burnell's 'Glossary of Anglo-Indian Words,' or the more severe 'Etymological Dictionary' of Prof. Skeat.

We do not think it too much to say that beyond all living ornithologists Prof. Newton is familiar with the works of the earlier

travellers, seafarers, and explorers, such as Oviedo, Leguat, Dampier and Carteret, as well as with later writers; while he has scarcely a rival in respect of the birds of the Shakespearian epoch. Under the heading "Extermination" he gives a sadly picturesque summary of the "passing" of many species which formerly inhabited the Mascarene Islands; among these being not only the comparatively notorious Dodo and the Solitaire, but also an allied Didine bird, as well as at least two species of Parrot, a Dove, a large Coot, and another Ralline bird (the flightless *Aphanapteryx*), an Owl, a Heron, &c. The abnormal Starling (*Fregilupus*) of Réunion survived until about forty years ago, and a remnant of the Parakeet (*Palæornis casul*) of Rodriguez is still awaiting the doom of its predecessors. In the West Indies, owing to the intervention of civilized man, quite as many species have died and made no sign. In our own days the Great Auk or Gare-Fowl has attained a melancholy celebrity, owing to its being classed as a "British" bird and the producer of eggs sold at sensational prices; but the Labrador Duck, the Phillip-Island Parrot, the *Mamo* of the Sandwich Islands, and others are quite as worthy of note, though their end has been more obscure. The important article on "Geographical Distribution" covers upwards of fifty pages, and is illustrated by a map showing approximately the six zoogeographical regions; the number being the same as proposed by Mr. P. L. Selater in his well-known scheme, but the Palæarctic and Nearctic of the latter are united by Prof. Newton under the heading Holarctic, while a New Zealand Region is added. For this modification strong—and, to our mind, convincing—reasons are adduced. The subject of "Migration" is treated with characteristic caution as regards the broad lines, and even on a matter of detail it is, perhaps, rash on our part to "rush in" with a suggestion that the absence of any evidence as to the halting of the Red-spotted Bluethroat (*Cyanecula suecica*) on its transit between Egypt and the shores of the Baltic may be due to the absence of observers along the route adopted by that little bird. Prof. Collett has pointed out that this species reaches its breeding-grounds in Norway from the east, and never follows the western coast-line; while a glance at the map will show that between the meridians of 28° and 35° E. (a fair "mean") there is very little chance of any resting-place on passage being noticed. Where are the recorders of Kishineff and Kieff, of Minsk or Vitebsk? The western race of Bluethroat with the white spot can be traced resting on its gradual passage northward in spring, and it seems improbable that a form merely differing in respect of its chestnut-coloured spot (in the male) should adopt the violent measure of rushing across Europe, precisely where that continent is broadest and where the congenial natural conditions seem to invite a stay for repose and food.

The Introduction, which, of course, appeared in Part IV., consists (with its separate Index) of 124 pages, and is a masterly review of the progress of Ornithology from the dawn of science to the present time. Amusement as well as instruction is afforded by the descrip-

tion of the Quinary System—the Swedenborgianism of ornithology—adopted in the days of Vigors, Swainson, W. S. Macleay, and Oken; while an attempt is made to claim tardy justice for the honest work of L'Herminier, neglected by his contemporaries, who were busied with futile systems. Matter worthy of serious consideration, however, begins with the enunciation by Huxley of the theory now generally accepted, namely that Birds are descended from Reptilian forms; and the treatise of that distinguished naturalist, as well as the schemes of classification proposed by his successors, are here analysed with remarkable lucidity. An important feature consists in the prominence given to Prof. Fürbringer's contribution to Systematic Ornithology, published in 1888: a work which does not seem to have obtained from British naturalists the attention it deserves. His researches (to quote Prof. Newton) "put the Reptilian pedigree of Birds and the position of the Ratitæ in a wholly new light, incidentally proving the latter to be derived from ancestors fully endowed with wings." It should be mentioned that Prof. Marsh's Odontornithes had already been discussed, and that Prof. Fürbringer's position does not upset Prof. Marsh's contention that the first Birds had not the faculty of flight. "It only makes evident that between the volant forefathers of the modern Ratitæ and the very first Birds there intervened an indefinite but great number of forms, of which few, if any, traces are known to us, and that the origin of Birds is far more remote than we had been inclined to suppose. Birds, considers Prof. Fürbringer, since they spring from Reptiles, must have begun with toothed forms of small or moderate size, with long tails and four Lizard-like feet, having distinct metacarpals and metatarsals, besides well-formed claws, while their bodies were clothed with a very primitive kind of down." He traces the development of these forms to their gradual attainment of the faculty of flight, and their improvement in that direction, until we find the type of the higher or better Birds of Flight established in the Cretaceous *Icthyornis* and including the vast majority of existing Birds commonly grouped as Carinatae. But during the period that the higher and lower types were being differentiated came a retrograde movement and a dwindling of the volant power—the drift of the evidence being that the Ratitæ are not entitled to be considered a distinct subclass, but that they diverged from their flying ancestors at different epochs. Such seem to be some of the principal points in Prof. Newton's excellent epitome; and if in the space at our disposal we have done him an injustice, the reader must apply the antidote by reference to the original (pp. 100–105). For the Author's able review of the present position of the taxonomy of Birds, pp. 108–120 must be carefully studied.

To the present work Dr. Hans Gadow has contributed many valuable articles on Anatomy: such as Colour, Embryology, Feathers, Digestive, Muscular, and Vascular Systems, Pterylosis, Skeleton, &c., these being distinguished by Italic type. Mr. R. Lydekker has ably undertaken the Fossil Birds; an article on Flight by the late

Prof. C. S. Roy contains the clearest explanation of aerial motion with which we are acquainted; and Dr. Shufeldt, formerly of the United States Army, has assisted. It only remains to say, as an indication of the care bestowed upon the work, that the *Notanda et Corrigenda* occupy nearly 4 pp. of small print.

*Trouessart's 'Catalogus Mammalium.'* Fasciculus III., completing the Rodentia, pp. 453-664. Berlin, 1897.

THE issue of the third fasciculus of this important work so closely following the second shows that the author is well advanced with his material. Needless to say, the present part maintains the high level of its predecessors, and Dr. Trouessart is to be congratulated on having got through such a difficult group as the Rodentia, especially when fossil forms have to be wedged in among their recent relatives.

In this section the author has had the advantage of consulting Mr. Thomas's recent revision of the Rodentia, which appeared too late for incorporation in the preceding part. While adopting the revision to a great extent, Dr. Trouessart has seen reason to depart from it in some particulars: notably, he refuses to admit the supersession of the familiar *Myoxus* by the forgotten *Glis*, and consequently retains *Myoxidæ* in place of *Gliridæ*. Whether the reasons he gives for the retention will be accepted by the "innovation school" remains to be seen: it is to be hoped they will. Most zoologists will be glad to see that *Cricetus* retains its place against *Hamster*; and it appears that this settlement rests on a firmly established basis of fact. The adoption of the barbarous *Coendû* for the South-American Tree-Porcupines is, however, distinctly to be regretted, and still more so the substitution of the new *Coendidæ* for the *Erithizontidæ* of Mr. Thomas. It appears that the reason for this substitution is the mistaken notion that the earliest generic name in a family must necessarily be the one from which the family name is taken.

In regard to extinct forms, it is a pity that the author regards the Tertiary beds of Patagonia as of Eocene age, and still more so that he admits the endless host of nominal species which have been named by the Argentine palæontologists.

It is also a subject for regret that the references to the various genera throughout the work have not been given, instead of merely the date of publication. Errors and misprints are exceedingly few; but since the author adheres to the original spelling of names, there is no doubt that *Limacomys* (p. 470) should stand as *Leimacomys*, although the former is really the proper way of transliterating.

We look forward to have ere long the pleasure of congratulating Dr. Trouessart on the completion of his arduous task. R. L.